

An Inventory of (Non-Commercial) Educational Radio Programming

by

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with

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(For discussion purposes only; not
for publication in present form)

June 1949
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University of Illinois
Urbana, Illinois

I. PURPOSE AND PROCEDURE.

Four years after "the bomb," an inventory of educational radio programs is in order. Four years after educational institutions generally (and a little frantically) assumed the educational responsibilities implied by our present science and technology, it seems appropriate to find out what they are doing about it -- over the radio.

For several reasons this study cannot pretend to furnish sufficient material for a thorough appraisal of educational radio program service. "Appraisal" in any precise sense implies a comparison of performance with agreed-to standards. While agreement probably exists in very general terms among educators as to the standards which should govern their use of radio, the very looseness of these principles seems to stand in the way of their use in appraising performance. A second limitation on the usefulness of this study for appraisal purposes lies in the technical defects of this sort of mass-production of content analysis. In employing the techniques used below, however, consolation may be drawn from the thought that they do have considerable validity. And unless or until some public or private agency devotes perhaps \$100,000 a year for a number of years to the development of methods and a body of information on radio program performance, the job of appraising the program service of the whole broadcast structure in the United States will not be done thoroughly and comprehensively.^{1/} In the meantime, the rather crude methods employed here probably will serve--after a fashion--educators and commercial broadcasters alike.^{2/}

^{1/} Chairman Frank McNinch about 1939 recommended that the FCC should establish an organizational unit to do this kind of operation. In recognizing its role in relation to the program service of broadcasters through promulgating the "Bluebook", the FCC implied in several places in the report its intention to scrutinize licensees' performance in a serious way. In regard to private agencies, the Commission on the Freedom of the Press recommended "the establishment of a new and independent agency to appraise and report annually upon the performance" of radio and other media of mass communication.

^{2/} For a study of commercial radio program performance by the NAB, see Kenneth Baker, "An Analysis of Radio's Programming," Radio Research, 1948-1949 (edited by Lazarsfeld, Paul F., and Frank Stanton), 1949. Harper Bros.

Beyond the fundamental purpose stated above, inquiry into programming by educational organizations may serve more limited purposes. Granted that educational broadcasters have not been favored with the most desirable frequency assignments, it is pertinent to ask, how effectively are they using what they do have in the way of facilities. A great deal of adverse criticism has been directed against commercial broadcast programming. This fact arouses some interest in seeing how different, or how similar to commercial programming is that currently broadcast by educators.

With these thoughts in mind, two kinds of letters were sent May 6, 1949, to the members of the National Association of Educational Broadcasters. One letter was sent to active members of the Association. It stated that we wanted to make an analysis of the programs broadcast by educational stations, and asked the station to send us its program log for the week, May 1-7, 1949. Respondents were asked to mark those log entries which were "full locally produced shows as distinguished from syndicated transcription features, network programs, or local programs consisting of recorded or transcribed music." The second letter was sent to associate members of the Association, most of whom are program producers, but not station operators. This letter asked "...if you would tell us what arrangements you have for broadcasting and give us a listing of the programs you broadcast through the typical week, May 1-7, 1949."

From a sampling standpoint, it will be noted that in choosing to use the membership list of the NAEB, we covered 24 AM stations, and 31 FM stations. Substantially complete coverage was thus attempted on operators of non-commercial educational broadcast stations. Our second letter was mailed to 50 program producing institutions. It is known that a number of educational institutions which produce some radio programs but do not operate broadcast stations are outside the NAEB membership. Our sample of program producers may thus be characterized as a large "chunk" of the universe of program producers. It has one obvious bias: program

producers in our study will be those who for one reason or another maintain NAEB memberships. They may therefore be expected to hold a stronger sense of responsibility in their radio programming than non-member producers.

Information on the coverage of the study is presented graphically in the maps, Figures 1 and 2, and statistically in Table 1. The responses included usable replies from 18 AM, 19 FM, 4 Wired Wireless, and 33 program producing agencies.^{1/} Substantially complete coverage was thus achieved on station operation, and the quantitative results of analysis of their operations may be evaluated in the light of this fact. The only AM educational non-commercial stations from which usable replies were not received were KFKU, WSAJ, KWLC, and WCAL.^{2/} Only one operating non-commercial FM station did not return a usable reply, WCAL-FM.

Although two-thirds of the program producing agencies canvassed returned usable replies, the representativeness of the results of this part of the study is questionable from a quantitative viewpoint; qualitatively it is meaningful, if understood as being biased toward the more serious and conscientious operations.

While the use of a simple request for program information, rather than a questionnaire into which the respondents would classify their program activities, may have contributed to the high percentage of responses, it created serious problems of coding and tabulation, which are discussed in the next section.

There was considerable heterogeneity in the responses received. In some cases copies of the actual station logs were provided; in others, there were newspaper clippings of the station's programs. In some cases descriptive literature was included which greatly aided proper classification of the program material. In

^{1/} Replies were also received from WHCU (Cornell) and WRUF (Univ. of Florida) and their FM affiliates. It was decided not to use these replies, inasmuch as the stations are licensed and operate as commercial stations, though they maintain NAEB memberships.

^{2/} KFKU is a 5 kw share time station licensed to the University of Kansas; KWLC is a 250 w specified hours station licensed to Luther College, Iowa; WCAL is a 5 kw share time station licensed to St. Olaf College, Minnesota; and ~~KWLC~~ is a 100 w specified hour station licensed to Grove City College, Pennsylvania.

WSAJ

SERVICE PATTERNS, LIMITATIONS AND FREQUENCIES, 1949

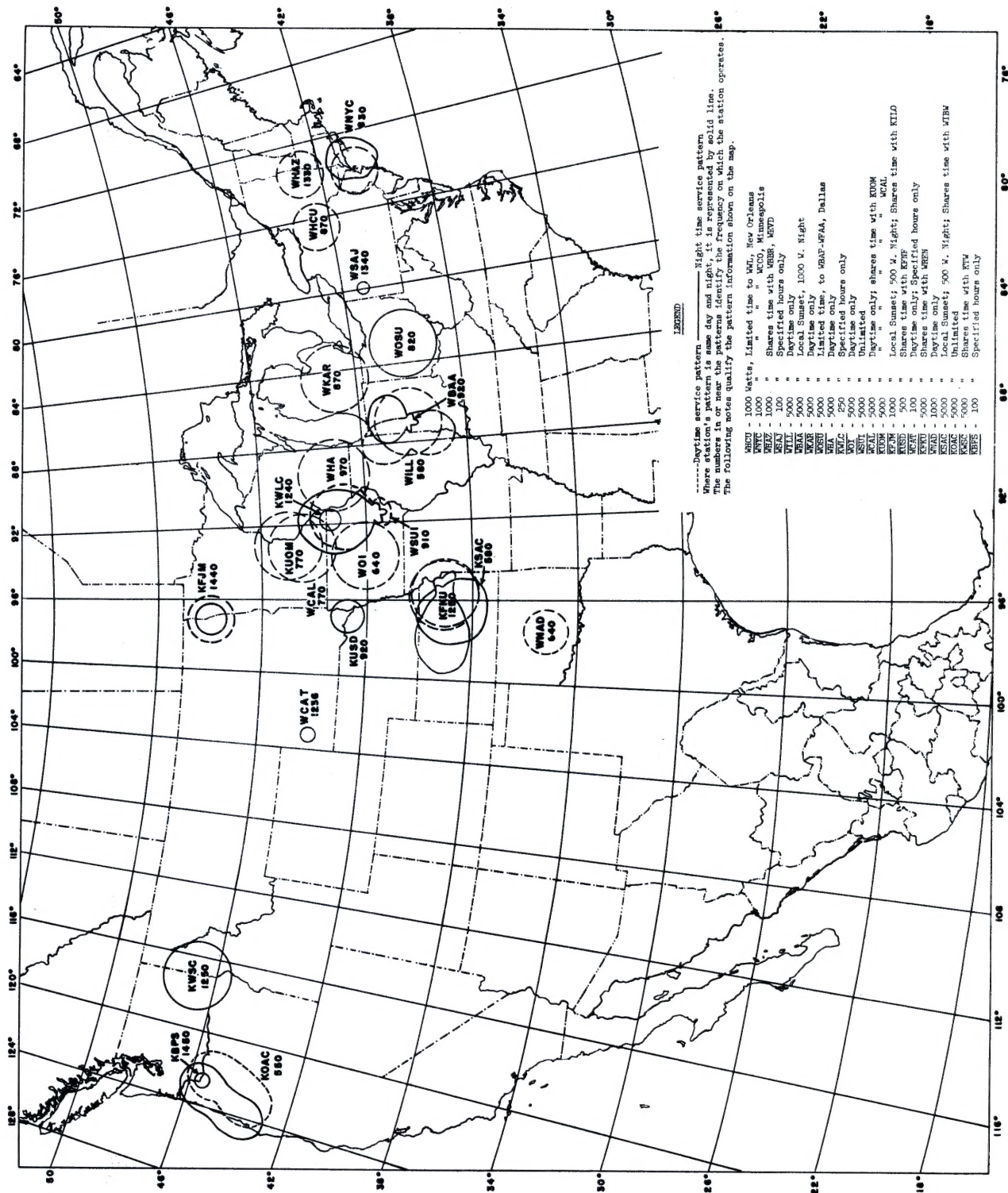


Table 1

Educational Radio Service Covered by Survey, May 1-7, 1949

	<u>Station Operations</u>		<u>Program Producing Agencies</u>
	<u>AM</u>	<u>FM</u>	
Inquiries mailed	24 ^a / ₁₈	32 ^b / ₁₉	50
Usable replies received			33
Geographical distribution			
Atlantic Coast States North of Potomac			
Inquiries mailed	4	6	11
Usable returns	2	3	7
South Atlantic and South Central States			
Inquiries mailed	2	9	13
Usable returns	1	5	7
North Central States			
Inquiries mailed	15	15	17
Usable returns	12	9	11
Mountain States			
Inquiries mailed	-	-	4
Usable returns	-	-	3
Pacific States and Hawaii			
Inquiries mailed	3	2	5
Usable returns	3	2	5

a/ Exclusive of one short wave station and four wired wireless stations (Stephens, Grinnell, Alabama, and De Pauw).

b/ Including eight reporting "station under construction" and one "station abandoned".

c/ See Footnote a. Also, in addition to the 18 replies used, responses were received covering WHCU and WRUF. These were not used because the stations are licensed and operate as commercial stations, though they maintain NAEB memberships.

d/ Explanation in Footnote c for WHCU and WRUF also applies to their FM affiliates.

almost all instances, respondents either initially or through follow-up letters, supplied the requested coding of programs as between "local" and "non-local." In the few cases where this was not done the patterns established by the bulk of the stations were applied--i.e., news was generally assumed to be "local;" most musical programs, unless their title suggested local origination, were assumed to be "non-local." Farm, discussion, religious, homemaking, and dramatic programs were assumed to be "local." Certain transcribed programs used by many stations, such as "Guest Star," were readily identified as non-local.

The tabulation of total hours on the air, and the breakdown of time into "before 6:00 p.m." and "after 6:00 p.m. (including all Sunday time)" was clear-cut and judgment-free.

Classification of the program material into the 16 program categories presented problems and it was in this area that discretionary judgments played the greatest role. It was realized that uniformity and accuracy in classifying programs would not be easy in all cases, even for a jury of expert program analysts after listening to the programs. Obviously we could expect substantially less accurate results with a procedure which rested on the titles of programs. Mindful of this overall qualification, we sought to achieve a maximum accuracy by the use of the following working definitions of program categories.

Music. Included as music were all programs which appeared to be primarily musical in character, including music appreciation programs and "disc jockey" shows where the music was interspersed with news or other comment. Programs of religious music, however, were classified under "religion." "Music, total" is a clean-cut and reliable category. Problems arose when "Twilight Serenade" or "Music in the Afternoon" had to be further classified as "Dance and Popular," "Semi-classical," or "Classical." As a rule, such programs as these were classified as "semi-classical." Fortunately, most musical programs had less ambiguous titles--"Date with a Disc," "Dancetime," "Evening Symphony," and the like.

"Educational." This category was used to include all programs primarily of an informational or cultural nature, exclusive of music, dramatic programs, or talks specifically on public issues, religion, farm matters, or homemaking. Thus, included in this category were all programs designed for classroom use, as well as readings of literature, talks on such diverse subjects as safety, mental hygiene and American history, as well as programs produced by such organizations as the Parent-Teachers Association. Children's programs, except those clearly dramatic or musical, were also included, on the assumption that they were actually educational in purpose.

News. Perhaps the simplest to define, this category is probably the most homogeneous in character. We considered "news" to include news, commentary and news from all community levels--i.e., national, local, campus or school. Farm news was excluded from it.

Public Issues. This category was used to cover talks and forum- or discussion-type programs on subjects which could reasonably be considered controversial.

Sports. This classification included broadcasts of sporting events and sports news.

Farm. Included here were talks on farm problems, agricultural research, and advice, market and crop news, reports and other programs which appeared to be designed for the farm audience.

Drama. We interpreted this category narrowly, including only those programs whose titles clearly indicated their dramatic form.

Religion. Here we included church and lay broadcasts on religious subjects and hymns and other sacred music.

Homemaking. This category included all specifically designated women's programs and talks on such subjects as gardening, choosing a deep-freezer, home decoration and the like. We defined this category rather narrowly, excluding a

substantial number of programs on children's problems, parent-child relations and similar subjects which we treated as "educational."

Institutional. This category was created to include promotional and recruiting programs produced by and broadcast on behalf of such organizations as the military services, Veterans' Administration, Treasury Department, Cancer Foundation, etc.

Variety. Here were included a small number of quiz shows, campus follies, etc.

Other. This was a residual catch-all category for programs whose titles were so ambiguous as to preclude their classification in the preceding categories.

II. TIME ON THE AIR.

One common denominator applies to all educational radio: the amount of program time broadcast, whether over the institution's own station or over other (usually commercial) stations. Table 2 is therefore presented as one summary measure of educational radio performance. In the week of May 1-7, 1949, the total of educational stations' program time on the air was just short of 2,200 of which 5 per cent was contributed by four wired wireless stations and the remainder almost equally divided between AM and FM stations. The total number of hours for which the educational program producers covered by this study aired programs was 347.

Inflating the station operation figures to include hours of operation (at the average) for the four AM non-commercial educational stations excluded from this report, yields a total for 22 such stations^{1/} of 1257 hours. Similarly, inflating the FM station hours to account for the one missing non-commercial educational FM station^{2/}, gives a total for 20 FM stations of 1080 hours. An estimated grand total of station operations in the week mentioned is therefore less than 2500 hours.

^{1/} The difference between this total and the 24 shown in Table 1, is WRUF and WHCU, commercial stations, operated by universities which are members of NAEB.

^{2/} WCAL-FM, Station WHCU-FM although an active NAEB member is a commercial station, as is Station WRUF-FM, and these are therefore excluded from this calculation.

Table 2

Educational Stations: Total Hours of Broadcast Time, Before and After 6 P.M.^{1/}

May 1-7, 1949

Stations	Before 6 P.M. Mon. - Sat.	After 6 P.M. and Sundays	Total Time
By Educational Stations:			
18 AM Stations	816:25	249:00	1065:25
19 FM Stations	660:19	372:49	1033:08
4 Wired Wireless Stations	36:30	56:15	92:45
Total - 41 Stations	1513:14	678:04	2191:18
By 33 Educational Program Producers	167:00	180:42	347:42
Total -- Educational Radio	1680:14	858:46	2539:00

^{1/} Counting all Sunday time with "after 6 P.M. time."

These figures appear to be small in relation to the operating schedules possible, even under the limitations imposed by the stations' FCC licenses.^{1/} Thus, as Table 2 indicates, the AM stations averaged only 45:20 hours per week before 6:00 p.m., Monday through Saturday, and only 13:50 hours after 6:00 p.m. and on Sunday. Their week-day daytime programming averaged only 7:33 hours per day. Even more indicative of incomplete utilization of facilities are the corresponding averages for FM educational stations where no limitations on operating time are imposed by the FCC. There, we see that the average per week before 6:00 p.m., Monday through Saturday was 34:45 hours (or 5:47 hours per day), and after 6:00 p.m. and on Sunday, 19:36 hours. The Wired Wireless stations, as would be expected, operated still shorter hours. For the week surveyed, the four Wired Wireless stations operated an average of 9:08 hours before 6:00 p.m., Monday through Saturday, and 14:04 hours after 6:00 p.m. and on Sunday.

It is of some interest to observe that the program producing institutions had a larger number of air-hours after 6:00 p.m. and on Sundays than they had before 6:00 p.m., Monday through Saturday.

Placed in the perspective of their relation to the program time used by commercial stations, the performance of the educational stations looks quantitatively small indeed. Lacking official data on the hours of service by commercial stations, we may estimate them roughly as follows:

Estimate of Total Broadcast Time of Commercial Stations, about May 1, 1949

Type of Station	Number of Stations			Estimated average daily hours of operation		Estimated Total Weekly Hours of Operation
	Unlimited Time	Limited Time	Total	Unlimited Time	Limited Time	
AM	1442 ^{a/}	533 ^{a/}	1975 ^{b/}	17	12	216,370
FM	724		724	6		30,408
TV	60		60	5		2,100
Total						248,878

^{1/} These limitations are summarized in the legend in Figure 1.

^{a/} Estimated by applying Jan. 1, 1948 ratio of limited to unlimited time stations (data from FCC), to number of stations on the air about May 1, 1949 (per Broadcasting Magazine).

^{b/} Broadcasting Magazine, May 9, 1949, p. 75.

AM educational station programming is equal to 0.58 per cent of AM commercial program time. FM educational station programming is equal to 3.5 per cent of FM commercial program time. If commercial AM, FM, and TV broadcast time be totaled, its sum is one-hundred times that of educational station broadcasting, generously estimated.

The regional characteristics of educational broadcasting are very striking. It is heavily concentrated in the North Central States. This may be seen from Figs. 1 and 2 and from Table 1. In this group of States are located 12 of the 18 AM respondents in the present survey, with 686 of the 1065 broadcast hours. The North Atlantic States, on the other hand, have only two of the stations with 117 hours (of which WNYC accounts for 112). The Southern States have only one of the stations with 67.5 hours. The Mountain States are stationless, and the Pacific Coast has the remaining three stations with 194 broadcasting hours.

III. EDUCATIONAL STATION OPERATIONS.

The following analysis of the program fare offered by educational stations is built around two lines of inquiry concerning aggregates of their programs. One line of analysis is as to "type of program." The second is as to "source of program." Following one section on each of these aspects, the analysis of station operations closes with a brief exploration of the differences between individual station operations.

(a) Types of Programs. A summary presentation of the types of programs broadcast by educational stations, May 1-7, 1949 is given in Table 3. In considering the differences in programming by the AM, FM, and Wired Wireless stations, it should be pointed out that seven of the FM stations, with aggregate air time of 546 hours, or about 53 per cent of total FM air time, were operated in conjunction with AM stations, with a substantial amount of joint programming. Otherwise the table speaks pretty much for itself. Music is the largest program segment for all three forms of educational station operation. "Educational," News, and Public

Table 3

Educational Stations' Program Time, May 1-7, 1949, by Type of Program

Type of Program	18 AM Educational Stations (percent)	19 FM Educational Stations (percent)	4 Wired Wireless Stations (percent)	41 Educational Stations (percent)
Music - Total	<u>44.51</u>	<u>50.51</u>	<u>56.87</u>	<u>47.86</u>
Folk and Western	0.74	1.05	-	0.86
Dance and Popular	13.20	9.23	43.12	12.59
Semi-classical	15.07	20.13	5.66	17.06
Classical	15.49	20.08	8.09	17.35
"Educational"	16.68	17.52	4.49	16.56
News	10.17	8.77	7.91	9.42
Public Issues	7.55	6.34	0.36	6.68
Sports	2.31	3.42	11.05	3.21
Farm	6.61	2.61	-	4.45
Drama	1.98	2.95	3.77	2.52
Religion	1.86	1.54	-	1.64
Home-making	3.23	1.69	0.81	2.40
Institutional	0.93	0.91	1.07	0.93
Variety	0.96	1.03	6.74	1.24
Other	<u>3.17</u>	<u>2.69</u>	<u>6.92</u>	<u>3.10</u>
Total - All Types	<u>99.69</u>	<u>99.98</u>	<u>99.99</u>	<u>100.00</u>

Issues programs rank next in that order for AM and FM educational stations. For Wired Wireless stations, however, Sports, News and "Other" programs follow Music, in that order.

It will be noted that FM stations devote more of their total program time to music than do AM stations (50.5 per cent as against 44.5 per cent), while wired wireless stations program well over half of their total time with music. FM stations devote about 40 per cent of their time to classical or semi-classical, while AM stations give 30 per cent to these types of music. "Educational," Sports, and Drama programs occupy proportionately more time of the FM than of the AM stations, while News, Farm, and Homemaking programs occupy proportionately less.

For comparative purposes, Table 4 presents results from a 1946 NAB study of commercial AM station programming, recently published by Kenneth Baker. The contrast in program types between educational and all commercial AM stations is striking. Proportionately the largest differences are in the amount of time given to what we have termed "Education" and Public Issues programs (and to which the nearest NAB equivalent categories appear to be Talks and Forums and Panels). Educational stations devote 23 per cent of their program time to such programs while commercial stations give 4 per cent. The second most striking difference is in respect to dramatic programs where the commercial stations are shown as carrying 16 per cent and educational stations 2.5 per cent. The difference in dramatic offerings is mostly in Daytime Serials, Mystery Drama, and Comedy Drama programs which aggregate 11 per cent for commercial stations and do not appear on educational station logs. The Music category shows relatively little difference in total (educational stations 48 per cent, commercial stations 41). However, the commercial stations carry 26 per cent Popular and Dance Music, while the educational stations carry 13 per cent. Conversely, the educational stations carry 34 per cent Classical and Semi-Classical Music, but the commercial stations devote 8 per cent to this type of program. The only two classes of programs which receive about the same proportion of program time as between the two types of stations are News

Table 4

Commercial AM Stations' Program Time,
by Type of Program and Size of Station,
Nov. 21-27, 1946^{1/}

Program Type	Small Stations (250 w. and less)		Medium Stations (500 w. to 5 kw)		Large Stations (7.5 kw to 50 kw)		Total Stations (all types)	
	%	%	%	%	%	%	%	%
Music Programs		48		37		33		41
Old Familiar and Western	7		7		6		7	
Popular and Dance	32		24		19		26	
Classical and Semi-classical	9		6		8		8	
Dramatic Programs		12		17		22		16
Daytime Serials	4		6		10		6	
Mystery Drama	2		4		3		3	
Comedy Drama	2		2		4		2	
Other Drama	4		5		5		5	
News and Commentators		11		14		14		13
Comedy and Variety		5		9		10		7
Quiz and Audience Participation		5		6		6		6
Religion and Religious Music		7		6		4		6
Sports and Sports Commentators		4		4		2		4
Talks		2		2		4		3
Farm Programs		2		2		3		2
Forums and Panels		1		1		1		1
Homemaking Programs		1		2		2		1
Miscellaneous, unclassified		2		1		2		2
		100		101*		103*		102*

Note: Percentages are calculated from the length of the program in minutes so that long and short programs receive their proper weight.

* These columns add to slightly more than 100 per cent because a few programs were classified in more than one category.

^{1/} Material taken from "An Analysis of Radio's Programming" by Kenneth Baker, Table 5, p. 59, in Communications Research 1948-1949, by Paul F. Lazarsfeld and Frank Stanton.

and Sports.

Similarities and dissimilarities between these ratios for educational and commercial AM stations should not serve to obscure the quantitative differences between program time devoted to the different types of programs by the two kinds of stations. Thus, the 23 per cent of program time of educational stations devoted to Public Issues and "Education" is estimated to represent but 500-odd hours, which is only about one-seventeenth as many hours as are represented by the 4 per cent of commercial AM stations time given to Talks and Forums and Panels. An opposite example would be Drama, where the 16 per cent of commercial stations time represents perhaps 34,000 hours of broadcast programs as compared with less than 100 hours representing 2 per cent of the broadcast program time of educational stations.^{1/}

(b) Sources of Programs. Possibly one of the best measures of the program resources and ingenuity of the station operator is information as to the source of his programs, such as is presented for the educational stations in Table 5 (A). Here it appears that just short of half of their programs are produced locally with live talent.

A comparison was desired of the sources of programs of educational and commercial broadcast stations. The FCC collects regularly^{2/} from every station a program log analysis which affords a thorough and complete comparison. When the current study was begun the FCC was requested to supply its existing tabulations showing this information for 1946. The request was denied. An appeal for reconsideration was made. The appeal was denied.^{3/}

Table 5 (B) presents the nearest approximation possible to the desired comparison. It, too, is drawn from Kenneth Baker's 1946 study. It shows separately

^{1/} This comparison rests on the application of Baker's 1946 program percentages to the hours of broadcast estimated above for AM stations about May 1, 1949. Obviously the projection is subject to error and must be used accordingly.

^{2/} Schedule 8, Form 324.

^{3/} Copies of this correspondence are available for study by participants in the seminar.

Table 5 (A)

Educational Stations' Program Time, by Source of Program for
AM, FM, and Wired Wireless, and all Stations, May 1-7, 1949

	Local Live Programs (percent)	Recorded or Trans- scribed Programs (percent)	Wire Programs a/ (percent)	Total (percent)
18 AM educational stations	46.3	51.7	2.0	100.0
19 FM educational stations	48.6	51.4	0	100.0
4 Wired Wireless stations	39.0	61.0	0	100.0
41 educational stations, total	47.1	51.9	1.0	100.0

a/ News reported by the stations as "non-local."

Table 5 (B)

Commercial Broadcast Stations' Programs, by Source of Program,
November 21-27, 1946^{a/}

	Local Live Programs (percent)	Recorded or Transcribed Programs (percent)	Net- work Programs (percent)	Wire Programs (percent)	Total (percent)
Sustaining Programs					
Network affiliated sta.	19	21	57	3	100.0
Non-network affiliated	24	63	3	10	100.0
All stations	19	26	51	4	100.0
Commercial Programs					
Network affiliated sta.	17	30	51	2	100.0
Non-network affiliated	21	71	4	4	100.0
All stations	17	35	45	3	100.0
News Programs and Commem- tators					
Network affiliated sta.	27	1	54	18	100.0
Non-network affiliated	41	1	3	55	100.0
All stations	28	1	49	22	100.0

a/ This table is taken from Kenneth Baker, "An Analysis of Radio's Programming," p. 61, 64, and 69, Communications Research, 1948-1949, Paul F. Lazarsfeld and Frank Stanton (editors).

for sustaining, commercial and news programs the proportions derived from the different sources; it does not, however, permit an overall comparison for commercial stations as such. In conjunction with Table 5 (A) it may be read as follows:

Whereas educational radio stations obtain 47 per cent of their programs from local live sources, 17 per cent of commercial and 19 per cent of sustaining programs of commercial AM stations are derived from this source. Networks provide 45 per cent of commercial and 51 per cent of sustaining programs for commercial AM stations, and none for educational stations. Recordings and transcriptions provide 52 per cent for educational stations as compared with 35 per cent for commercial and 26 per cent for sustaining programs of all commercial AM stations. If non-network affiliated AM stations alone are considered, they obtain 21 per cent of their commercial and 24 per cent of their sustaining programs from live sources and 71 and 63 per cent, respectively, from recordings and transcriptions, as compared with 47 per cent live and 52 per cent recorded and transcribed for educational stations.

To be really meaningful to students of educational broadcasting, the analysis of source of program material should be carried beyond the point of the station operation as a whole. Table 6 presents such an analysis for individual types of programs broadcast by AM, FM and Wired Wireless educational stations. Overall, FM educational stations appear to produce locally a slightly higher portion of their program time than AM stations (49 per cent as compared with 46 per cent). This difference is especially obvious with respect to Musical programs. In this category, 19 per cent of the FM programs are local live, while for AM the proportion is only 9 per cent. Wired Wireless stations lean more heavily on recorded material than either AM or FM stations.

Among AM stations, the proportion of local to total time is highest in the case of Farm, Homemaking, and Sports programs. More than 90 per cent is locally produced in all of these. At the other extreme, less than 10 per cent of program time is local live in the case of Institutional, Variety, and Music programs.

Table 6

Educational Stations' Program Time by Type and Source, for AM, FM
and Wired Wireless and All Stations, May 1-7, 1949

Type and Source of Program	18 AM Stations	19 FM Stations	4 Wired Wireless Stations	Total, 41 Stations
(H o u r s a n d m i n u t e s)				
Music, Total	474:14	521:51	52:45	1048:50
Local ^{1/}	43:59	98:18	5:45	148:02
Non-local ^{1/}	430:15	423:33	47:00	900:48
Folk and Western	7:55	10:51	-	18:46
Local	2:55	7:21	-	10:16
Non-local	5:00	3:30	-	8:30
Dance and popular	140:39	95:24	40:00	276:03
Local	4:28	14:50	4:45	24:03
Non-local	136:11	80:34	35:15	252:00
Semi-classical	160:35	208:03	5:15	373:53
Local	13:46	30:16	1:00	40:02
Non-local	146:49	177:47	4:15	328:51
Classical	165:05	207:33	7:30	380:08
Local	22:50	45:51	-	68:41
Non-local	142:15	161:42	7:30	311:27
"Educational"	177:43	181:03	4:10	362:56
Local	125:34	145:46	1:40	273:00
Non-local	52:09	35:17	2:30	89:56
News	108:24	90:40	7:20	206:24
Local	87:23	81:41	7:20	176:24
Non-local	21:01	8:59	-	30:00
Public Issues	80:28	65:32	:20	146:20
Local	69:34	55:02	:10	124:46
Non-local	10:54	10:30	:10	21:34
Sports	24:41	35:23	10:15	70:19
Local	22:55	35:23	10:05	68:23
Non-local	1:46	-	:10	1:56
Farm	70:30	26:55	-	97:25
Local	66:50	26:25	-	93:15
Non-local	3:40	:30	-	4:10
Drama	21:08	30:29	3:30	55:07
Local	12:40	15:51	:45	29:16
Non-local	8:28	14:38	2:45	25:51
Religion	19:55	15:55	-	35:50
Local	15:40	8:05	-	23:45
Non-local	4:15	7:50	-	12:05
Home-making	34:25	17:30	:45	52:40
Local	32:05	12:55	:30	45:30
Non-local	2:20	4:35	:15	7:10
Institutional	9:54	9:24	1:00	20:18
Local	:30	:45	-	1:15
Non-local	9:24	8:39	1:00	19:03
Variety	10:15	10:38	6:15	27:08
Local	:45	3:08	4:00	7:53
Non-local	9:30	7:30	2:15	19:15
Other	33:48	27:48	6:25	68:11
Local	15:44	19:08	5:55	40:17
Non-local	18:04	8:40	:30	27:11
Total, All Types	1065:25	1033:08	92:45	2191:18
Local	493:39	501:57	36:10	1031:46
Non-local	571:46	531:11	56:35	1159:32

^{1/} "Local" means produced with live talent by the station, as distinct from "non-local" which means produced via transcription, recorded or network material. Classification performed by respondents in most cases.

For FM stations, locally produced programs occupy the highest proportion of time in the Farm, Sports, and News programs (100, 100 and 90 per cent respectively). Local live programming is least apparent for FM stations in Music, Institutional, and Variety programs (19, 8, and 30 per cent respectively).

For those interested in pursuing the analysis of source of program further, Tables 7 and 8 present, for AM and FM stations respectively, the distribution of local and non-local programs within the 16 program categories by major geographic regions.

(c) Dispersion in Station Operations. The preceding analysis of station programming has been in terms of aggregates of stations, whatever the grouping according to their characteristics. It is recognized, of course, that individual station operations may differ widely even within the same group. In this section such differences are briefly explored.

Dispersion between stations in respect to time on the air may be observed from Table 9. It arrays the AM and FM stations separately with respect to this factor. It will be noted that the range from highest to lowest is proportionately greater for AM stations than it is for FM stations. One AM station operates as little as 6 hours a week, while at the other extreme another operates 111 hours. The shortest schedule for FM on the other hand is 21 hours, and the longest, 125. The relative under-development of use of FM educational facilities, previously remarked, is again suggested by the fact that the median number of hours per week is 40 for FM and 75 for AM.

A similar analysis of the dispersion of station program types and program sources is presented in Tables 10 and 11. Table 10 relates to AM educational stations; Table 11, to FM stations. Comparison of the ranges of ratios of "local" to total program time reveal substantial similarity as between AM and FM. The highest proportions are 82 and 80 per cent, respectively, while the lowest are 4 and 17 per cent. The medians in both cases are 51 per cent.

Table 7

18 AM Educational Stations: Type and Source of Programs,
by Major Geographic Regions in Which Stations Located, May 1-7, 1949

Type and Source of Program	Atlantic Coast	South Atlantic	North Atlantic		Pacific
	North of Potomac	and South Central	North Central	Mountain	Coast
	(H o u r s a n d M i n u t e s)				
Music, Total	57:54	25:25	291:40	-	99:15
Local	11:50	6:25	23:44	-	2:00
Non-local	46:04	19:00	267:56	-	97:15
Folk and Western	:30	:55	5:00	-	1:30
Local	:30	:55	1:30	-	-
Non-local	-	-	3:30	-	1:30
Dance and Popular	3:10	2:45	82:44	-	52:30
Local	-	-	4:28	-	-
Non-local	3:10	2:45	77:46	-	52:30
Semi-classical	7:18	12:00	124:17	-	17:00
Local	1:25	1:00	10:21	-	1:00
Non-local	5:53	11:00	113:56	-	16:00
Classical	46:56	9:45	80:09	-	28:15
Local	9:55	4:30	7:25	-	1:00
Non-local	37:01	5:15	72:44	-	27:15
"Educational"	8:11	17:40	125:37	-	26:15
Local	2:34	14:55	93:15	-	14:50
Non-local	5:37	2:45	32:22	-	11:25
News	9:43	8:57	68:54	-	20:50
Local	9:28	8:57	58:38	-	10:20
Non-local	:15	-	10:16	-	10:30
Public Issues	33:12	6:45	35:36	-	4:55
Local	32:57	6:15	28:27	-	1:55
Non-local	:15	:30	7:09	-	3:00
Sports	2:15	1:45	16:11	-	4:30
Local	2:15	1:45	14:25	-	4:30
Non-local	-	-	1:46	-	-
Farm	-	:25	60:20	-	9:45
Local	-	:25	56:40	-	9:45
Non-local	-	-	3:40	-	-
Drama	3:10	:15	11:28	-	6:15
Local	1:25	:15	9:45	-	1:15
Non-local	1:45	-	1:43	-	5:00
Religion	-	3:00	14:40	-	2:15
Local	-	3:00	11:40	-	1:00
Non-local	-	-	3:00	-	1:15
Home-making	:55	2:00	25:45	-	5:45
Local	:55	2:00	23:25	-	5:45
Non-local	-	-	2:20	-	-
Institutional	:15	:45	7:24	-	1:30
Local	-	-	:30	-	-
Non-local	:15	:45	6:54	-	1:30
Variety	1:00	:15	3:45	-	5:15
Local	:30	-	-	-	:15
Non-local	:30	:15	3:45	-	5:00
Other	1:10	:18	25:05	-	7:15
Local	:30	:18	13:01	-	1:55
Non-local	:40	-	12:04	-	5:20
Total, All Types	117:45	67:30	686:25	-	193:45
Local	62:24	44:15	333:30	-	53:30
Non-local	55:21	23:15	352:55	-	140:15

1/ "Local" means produced with live talent by the station, as distinct from "non-local", which means produced via transcription, recorded or network material. Classification performed by respondents in most cases.

Table 8

19 FM Educational Stations: Type and Source of Programs,
by Major Geographic Regions in Which Stations Located, May 1-7, 1949

Type and Source of Program	Atlantic Coast South Atlantic North of and Potomac South Central North Central Mountain Pacific Coast					
	(H o u r s a n d M i n u t e s)					
Music, Total	127:00	107:51	223:20	-	63:40	
Local	19:04	28:11	31:11	-	19:52	
Non-local	107:56	79:40	192:09	-	43:48	
Folk and Western	0:30	7:41	2:40	-	-	
Local	0:30	6:41	0:10	-	-	
Non-local	-	1:00	2:30	-	-	
Dance and Popular	18:09	26:50	36:42	-	13:43	
Local	1:15	6:00	6:50	-	0:45	
Non-local	16:54	20:50	29:52	-	12:58	
Semi-classical	32:44	42:05	109:46	-	23:28	
Local	5:32	9:15	12:06	-	3:23	
Non-local	27:12	32:50	97:40	-	20:05	
Classical	75:37	31:15	74:12	-	26:29	
Local	11:47	6:15	12:05	-	15:44	
Non-local	63:50	25:00	62:07	-	10:45	
"Educational"	16:37	53:07	98:17	-	13:02	
Local	11:10	39:51	83:46	-	10:59	
Non-local	5:27	13:16	14:31	-	2:03	
News	17:21	16:07	46:05	-	10:67	
Local	17:16	14:27	38:51	-	10:67	
Non-local	0:05	1:40	7:14	-	-	
Public Issues	13:23	12:20	33:43	-	6:06	
Local	9:53	8:50	30:43	-	5:36	
Non-local	3:30	3:30	3:00	-	0:30	
Sports	2:58	5:20	13:30	-	13:35	
Local	2:58	5:20	13:30	-	13:35	
Non-local	-	-	-	-	-	
Farm	-	0:40	26:15	-	-	
Local	-	0:40	25:45	-	-	
Non-local	-	-	0:30	-	-	
Drama	7:52	9:32	12:20	-	0:45	
Local	1:45	3:16	10:05	-	0:45	
Non-local	6:07	6:16	2:15	-	-	
Religion	1:15	3:55	9:00	-	1:45	
Local	1:15	3:35	3:00	-	0:15	
Non-local	-	0:20	6:00	-	1:30	
Home-making	0:55	3:30	9:50	-	3:15	
Local	0:55	3:15	8:45	-	-	
Non-local	-	0:15	1:05	-	3:15	
Institutional	1:29	1:00	6:10	-	0:45	
Local	0:15	-	0:30	-	-	
Non-local	1:14	1:00	5:40	-	0:45	
Variety	2:08	0:45	7:00	-	0:45	
Local	0:53	-	2:00	-	0:15	
Non-local	1:15	0:45	5:00	-	0:30	
Other	8:05	9:18	10:10	-	-	
Local	6:40	5:80	6:55	-	0:15	
Non-local	1:25	4:00	3:15	-	-	
Total, All Types	199:03	223:25	495:40	-	115:00	
Local	72:04	112:43	254:31	-	62:39	
Non-local	126:59	110:42	241:09	-	52:21	

Table 9

AM and FM Educational Stations Arrayed According to
Total Number of Hours on the Air, May 1-7, 1949

AM Stations		FM Stations	
<u>Call Letters</u>	<u>Number of Hours on Air</u>	<u>Call Letters</u>	<u>Number of Hours on Air</u>
WNYC	111:45	WNYC	125:39
KWSC	95:30	WHA	107:00
WSUI	85:30	KUSC	91:00
WILL	84:45	WIUC	90:45
WKAR	83:00	WKAR	85:00
WHA	80:15	WNAD	73:30
WOI	79:00	KWGS	58:30
WOSU	78:45	WAER	48:00
WBAA	78:00	WBOE	45:00
KOAC	72:00	WLSU	40:25
WNAD	67:30	KSUI	40:20
KUOM	52:30	WBEZ	33:20
KBPS	26:15	WUOM	31:15
KUSD	21:00	WABE	30:00
KSAC	20:30	WBGO	25:24
KFJM	14:00	WOI	24:00
WCAT	9:10	KCVN	24:00
WHAZ	6:00	WDTR	21:30
		WBKY	21:00
Median: 75:00		Median: 40:25	

Table 10

AM Educational Stations Arrayed According to Proportion of "Local" to
Total Program Time, and According to Proportion of
"Public Issues" to Total Program Time, May 1-7, 1949

<u>Call Letters</u>	<u>Percent "Local" is of Total Time</u>	<u>Call Letters</u>	<u>Percent "Public Issues" is of Total Time</u>
KSAC	82	WNYC	29
WNAD	66	WHA	14
KOAC	56	WNAD	10
WILL	54	KFJM	9
WNYC	54	KUSD	7.9
WHA	54	KSAC	7.3
WKAR	53	KBPS	6.7
WSUI	52	WSUI	6.0
WOI	51	WILL	6.0
WHAZ	50	WKAR	4.
WOSU	46	WOSU	3
WBAA	43	WCAT	2.7
KFJM	43	KOAC	2.3
KUSD	34	WBAA	2
KBPS	33	KUOM	1.9
WCAT	29	KWSC	1.6
KUOM	26	WOI	1.4
KWSC	4	WHAZ	0

Median: 50.5

Median: 5.0

Table 11

FM Educational Stations Arrayed According to Proportion of "Local" to
Total Program Time, and According to Proportion of
"Public Issues" to Total Program Time, May 1-7, 1949

<u>Call Letters</u>	<u>Percent "Local" is of Total Time</u>	<u>Call Letters</u>	<u>Percent "Public Issues" is of Total Time</u>
WBEZ	80	WBGO	15.6
KSUI	64	WBOE	13
WNAD	62	WHA	12
WDTR	59	WNAD	9.2
KUSC	56	WABE	9
WBKY	55	KSUI	8.7
WBOE	54	KCVN	8.3
WABE	53	WAER	7.3
WHA	51	WDTR	7
WIUC	51	WIUC	6
WBGO	49	WNYC	5
KCVN	48	KUSC	4.5
WAER	48	WUOM	4
WKAR	47	KWGS	3.4
WLSU	45	WKAR	3
WUOM	43	WBKY	2
KWGS	36	WBEZ	2
WNYC	29	WLSU	1.2
WOI	17	WOI	0
Median: 51		Median: 6.	

Analysis of the dispersion of stations according to program types was limited to one ratio: the percentage which Public Issues programs bore to total time. Similar analyses could be made for each program type. A wide range is observable in the case of both AM and FM stations in time devoted to public issues, the proportion varying from 29 and 16 per cent, respectively, to zero in both cases.

IV. EDUCATIONAL PROGRAM PRODUCING OPERATIONS.

It is to be remembered in approaching our survey of educational program producing agencies that quantitatively its results are not representative of all such agencies. Two additional sources of bias should be mentioned. Coming in the first week of May, our survey caught some educational institutions in vacation periods when they were inactive in radio.^{1/} Moreover, it is probable that differences in the interest and energy devoted by respondents to replying to our inquiry have biased the results.^{2/}

Table 12 presents the hours of transmitter time using programs produced by educational program producing agencies, classified by program type, and by geographical region. In calculating these data, program time was counted for each commercial (but not educational non-commercial) station carrying the program. To distinguish between stations which were very successful in having their programs carried by commercial stations, and those whose efforts are best represented by the production of programs, Table 13 is also presented. It shows the number of programs produced by the educational program producing agencies, by program types and by region.

It is noteworthy that educational program producers appear to emphasize "Educational" and Farm programs. They bulk largest in terms of program hours for

^{1/} The University of North Carolina is an example.

^{2/} For instance, Penn State College replied exhaustively, accounting for the radio program participation by its agricultural extension personnel in Pennsylvania counties. Accordingly, Penn State contributed a total of 52 Farm programs with 13 hours. On the other hand, the University of California which has an active Agricultural Extension Service radio-wise, reported no Farm programs at all.

Table 12

Educational Program Producers' Hours of Transmitter Time by
Type of Program and by Region, May 1-7, 1949

	Atlantic Coast States, North of Potomac <u>7 agencies</u>	So. Atlantic and So. Cen- tral States <u>7 agencies</u>	North Cen- tral States <u>11 agencies</u>
Music, Total	4:30	13:00	7:15
Folk & Western	-	-	0:30
Dance & Popular	-	-	-
Semi-classical	0:30	3:15	1:15
Classical	4:00	9:45	5:30
"Educational"	98:39	12:15	30:45
News	-	3:15	2:55
Public Issues	0:40	7:15	69:45 ^{b/}
Sports	-	2:40	0:45
Farm	13:00	0:45	2:30
Drama	2:30	2:03 ^{a/}	2:45 ^{c/}
Religion	-	-	0:45
Home-making	-	3:15	0:15 ^{d/}
Institutional	-	0:15	0:18
Variety	-	0:15	0:45
Other	6:42	1:30	0:35
Total	126:01	46:28	119:18

	Mountain States <u>3 agencies</u>	Pacific States and Hawaii <u>5 agencies</u>	Total - U. S. <u>33 agencies</u>	
			Hours	Percent
Music, Total	4:15	3:00	32:00	9.2
Folk & Western	0:15	-	0:45	e/
Dance & Popular	-	0:15	0:15	e/
Semi-classical	2:30	2:45	10:15	3.0
Classical	1:30	-	20:45	6.0
"Educational"	6:25	20:45	168:49	48.5
News	1:45	0:15	8:10	2.3
Public Issues	-	5:30	83:10	23.9 ^{b/}
Sports	-	0:30	3:55	1.1
Farm	4:45	0:30	21:30	6.2
Drama	1:30	1:15	10:03	2.8
Religion	-	-	0:45	e/
Home-making	4:15	1:00	8:45	2.5
Institutional	-	-	0:33	e/
Variety	-	-	1:00	e/
Other	-	0:15	9:02	2.6
Total	22:55	33:00	347:42	99.1

a/ Including one 18-minute show produced for commercial TV Station WTVJ-TV.

b/ Of which 65 hours is attributed to "Chicago Round Table of the Air."

c/ Of which 30 minutes were produced for commercial TV Station KSD-TV.

d/ Produced for commercial TV Station KSD-TV.

e/ Less than 1 per cent.

Table 13

Educational Program Producers' Number of Programs Produced by
Type of Program and by Region, May 1-7, 1949

	<u>Atlantic Coast States, North of Potomac 7 agencies</u>	<u>So. Atlantic and So. Cen- tral States 7 agencies</u>	<u>North Cen- tral States 11 agencies</u>
Music, Total	4	18	17
Folk & Western	-	-	2
Dance & Popular	-	-	-
Semi-classical	1	9	5
Classical	3	9	10
"Educational"	58	20	38
News	-	6	15
Public Issues	2	5	10
Sports	-	3	3
Farm	52	2	1
Drama	2	6	7
Religion	-	-	1
Home-making	-	3	1
Institutional	-	1	3
Variety	-	1	2
Other	5	6	5
Total	123	71	103

	<u>Mountain States 3 agencies</u>	<u>Pacific States and Hawaii 5 agencies</u>	<u>Total - U. S. 33 agencies</u>	
			<u>Number</u>	<u>Percent</u>
Music, Total	3	3	45	12.6
Folk & Western	1	-	3	1.0
Dance & Popular	-	1	1	a/
Semi-classical	1	2	18	5.0
Classical	1	-	23	6.4
"Educational"	5	13	134	37.4
News	1	1	23	6.4
Public Issues	-	7	24	6.7
Sports	-	2	8	2.2
Farm	10	2	67	18.7
Drama	1	3	19	5.3
Religion	-	-	1	a/
Home-making	8	1	13	3.6
Institutional	-	-	4	1.1
Variety	-	-	3	1.0
Other	-	1	17	4.7
Total	28	33	358	100.0

a/ Less than one percent.

these agencies whereas station operations showed Music programs leading by a wide margin. The same observation is true of numbers of programs produced.

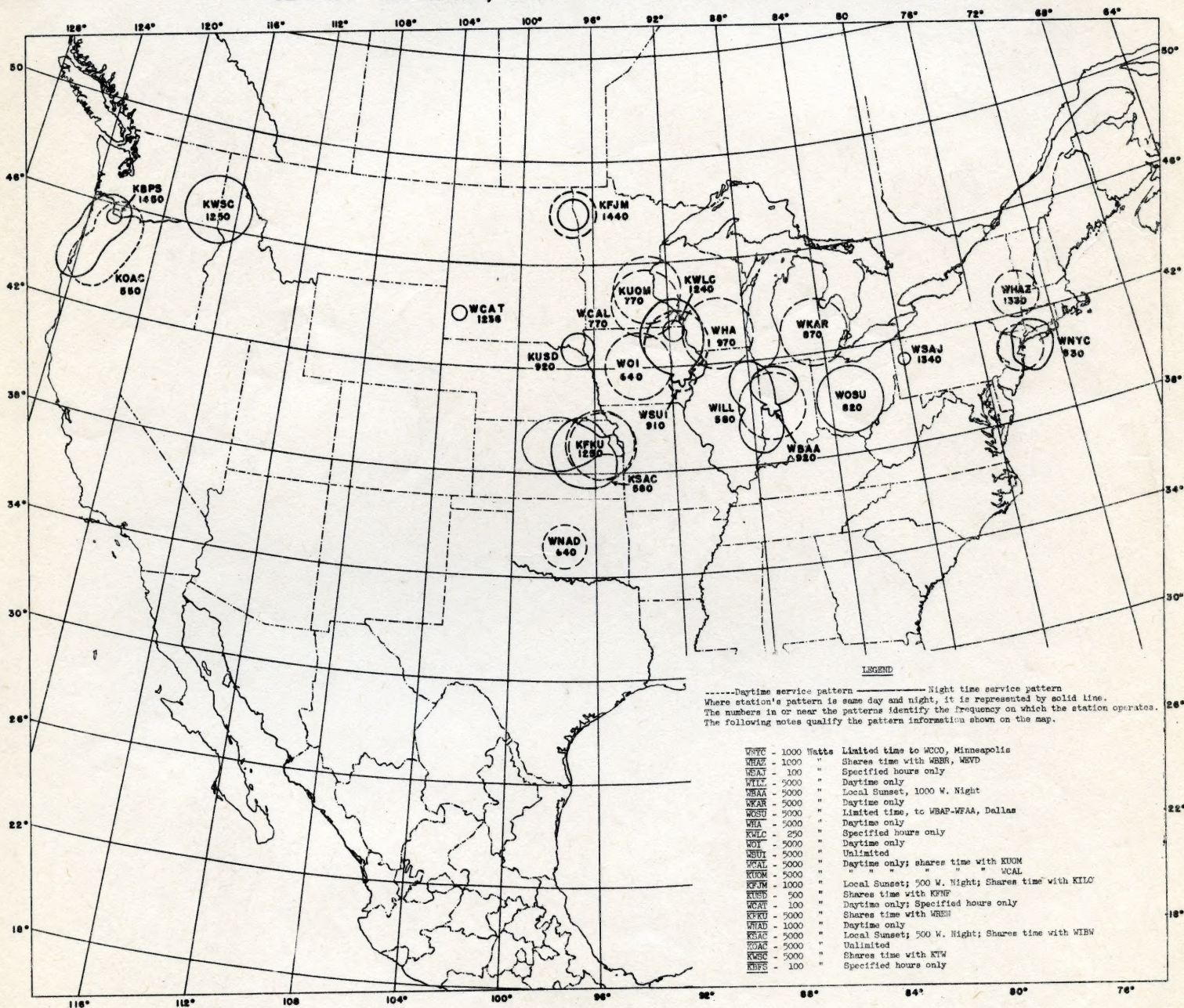
Regionally, great differences again appear. Program producers in the Atlantic States north of the Potomac River produce both more program hours and more programs than any other region, accounting for more than one-third of each. North Central States program producers were responsible for another third of the program hours and almost one-third of the programs.

In view of the concentration on "Education" and Public Issues programs among these agencies, it is of interest to analyze regional differences in these categories. The North Atlantic program producers provided 58 per cent of the hours and 43 per cent of the programs in the "Education" group, with the North Central producers coming in a slow second. In the Public Issues category, however, the North Central producers originated 84 per cent of the program hours and 42 per cent of the programs.

Table 14 provides a brief analysis of the differences between the operations of program producers, in terms of both hours and numbers of programs. The range is from zero to 88 hours of program time, and from zero to 63 programs.

FIGURE I. EDUCATIONAL AM BROADCAST STATIONS:

SERVICE PATTERNS, LIMITATIONS AND FREQUENCIES, 1949



Scanned from the National Association of Educational Broadcasters Records
at the Wisconsin Historical Society as part of
"Unlocking the Airwaves: Revitalizing an Early Public and Educational Radio Collection."



A collaboration among the Maryland Institute for Technology in the Humanities,
University of Wisconsin-Madison Department of Communication Arts,
and Wisconsin Historical Society.

Supported by a Humanities Collections and Reference Resources grant from
the National Endowment for the Humanities



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